

**IN THE CLAIMS**

1. (Currently Amended) A power supply device for supplying a stabilized output DC voltage to an electronic equipment having a controller for controlling said electronic equipment, said power supply, comprising:

a rectification section for rectifying an input AC voltage;

a primary side capacitor for smoothing an output voltage from said rectification section;

a switching power supply section for receiving a DC voltage from said primary side capacitor as an input DC voltage at a primary side thereof, switching the inputted DC voltage and generating ~~[[a]]~~ said stabilized output DC voltage at a secondary side thereof isolated from the primary side;

a current detection section comprising a current detector, and a photo-coupler having a photodiode connected parallel to said current detector via a resistor and a phototransistor supplied by said stabilized output DC voltage via a resistor, wherein said photodiode is current detector connected between said rectification section and said primary side capacitor for detecting of said switching power supply section detects a supply current supplied from said rectification section, and generates a voltage enough for turning on said photodiode, and wherein said phototransistor ~~for generating~~ generates a detection synchronization signal ~~[[is]]~~ isolated from said primary side in response to said ~~detected supply current~~ turning on of said photodiode ~~and for conveying the detection signal to an equipment connected to the secondary side of said switching power supply section; and~~

a control section monitors said synchronization signal outputted from said current detection section, generates a detection signal when said synchronization signal stops for more than a predetermined period of time, and outputs said detection signal to said controller;

wherein said controller of said electronic equipment performs an operation ending process of said operation circuit in response to the detection signal from said control section.

Claims 2-4. (Canceled)

5. (Currently Amended) An electronic equipment having a power supply for converting an input AC voltage into an output DC voltage, an operation circuit for operating using the output DC voltage outputted from said power supply as a voltage source, and a controller for controlling said operation circuit, said power supply, comprising:

a rectification section for rectifying an input AC voltage;

a primary side capacitor for smoothing an output voltage from said rectification section;

a switching power supply section for receiving a DC voltage from said primary side capacitor as an input DC voltage at a primary side thereof, switching the inputted DC voltage and generating a stabilized output DC voltage at a secondary side thereof isolated from the primary side;

a current detection section comprising a current detector, and a photo-coupler having a photodiode connected parallel to said current detector via a resistor and a phototransistor supplied by said stabilized output DC voltage via a resistor, wherein said photodiode current detector [[is]] connected between said rectification section and said primary side capacitor for detecting of said switching power supply section detects a supply current supplied from said rectification section, and generates a voltage enough for turning on said photodiode, wherein said phototransistor for generating generates a detection synchronization signal [[is]] isolated from said primary side in response to said detected supply current turning on of said photodiode;

~~an operation circuit for operating using the output DC voltage outputted from said~~  
~~switching power supply section as a voltage source; and~~  
~~a control section for operating using the output DC voltage outputted from said switching~~  
~~power supply section as a voltage source to control said operation circuit;~~  
wherein said ~~control section performing~~ controller performs an operation ending process  
of said operation circuit in response to the detection signal ~~from said photo-coupler~~ from said  
control section.

Claims 6-8. (Canceled)